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ABSTRACT

The Montgomery County (Maryland) Public Schools (MCPS) has developed this handbook for elementary, middle, and junior high school teachers to focus attention on the importance of the handwriting process. Information is offered on the following topics: (1) MCPS handwriting objectives, (2) organization for handwriting instruction, (3) examining and selecting approved handwriting programs, (4) readiness for handwriting instruction, (5) basic rules for good handwriting, (6) the left-handed student, (7) remediation, (8) illustrative programs for middle and junior high school students, (9) integration of handwriting with other subjects, (10) activities for handwriting centers, (11) ways for parents and guardians to help in handwriting instruction, (12) MCPS approved handwriting programs for the elementary grades, and (13) supporting materials for handwriting instruction. A glossary, an annotated bibliography, and a bibliography on handwriting instruction for left-handed writers are also included in the handbook. (RL)

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COMMUNICATING THROUGH HANDWRITING

A HANDBOOK FOR MANUSCRIPT AND CURSIVE WRITING

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Rockville, Maryland

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Norma Kuehnle, Coordinator
Elementary English Language Arts

INTRODUCTION

Effective communication skills are essential for every student, and *handwriting is a basic tool for effective written communication.*

Although students gradually develop personal handwriting styles, the major goal of handwriting instruction continues to be legibility with appropriate speed in both manuscript and cursive forms. *All* students, with *few* exceptions, can learn to write legibly with appropriate speed; and because their efforts in handwriting are rewarded by a visual product, they can receive immediate, positive reinforcement.

This *K–8 Handwriting Handbook* has been developed to focus on the importance of the handwriting process, which involves providing readiness experiences, formal instruction, practice, evaluation, and maintenance of basic handwriting skills. This handbook is designed to help teachers in elementary, middle, and junior high schools in implementing an effective handwriting program.

HANDWRITING OBJECTIVES FOR THE MONTGOMERY COUNTY PUBLIC SCHOOLS

The handwriting objectives which follow were developed as a part of the *Scope and Sequence of Instructional Objectives for Skills in Mechanics of Written Expression* (November 1975). They are included in this handbook for the convenience of teachers with planning and teaching responsibilities for handwriting. The objectives are listed for beginning primary, primary, intermediate, and upper elementary levels. Teachers of middle and junior high school students in Grades 6, 7, and 8 will find it helpful to review the objectives listed at the intermediate and upper levels and then use those that are appropriate for their needs.

BEGINNING PRIMARY

Level A

The child will:

1. Manipulate large marking crayons and paint brushes
2. Scribble, draw, and paint
3. Write letters and words voluntarily
4. Write his/her name from a model
5. Recognize forms, shapes, and sizes of letters

PRIMARY

Level B

The child will:

*(A:1–5)

6. Hold and use a primary pencil properly
7. Maintain correct posture while writing
8. Use correct paper position for writing in manuscript
9. Write some capital and some small letters in manuscript
10. Attempt to write letters and words in manuscript
11. Copy models of his/her name, words, and sentences in manuscript
12. Attempt to use appropriate spacing between letters and words
13. Write numerals 0–9 from a model
14. Recognize cursive letters by form and name, and associate the letter name with the form

---

*Letter(s) and numbers refer to preceding level(s) and instructional objectives which are to be taken into consideration *before* and/or *as* the students begin to work on newly identified instructional objectives.

Level C

The child will:

*(A:1–5, B:6–14)

15. Begin to align his/her writing in manuscript form

16. Properly space letters of words and words of sentences in writing on the chalkboard and on writing paper

17. Write with ease all capital and small letters in correct manuscript

18. Write correctly all numerals 0–9

19. Use margins

20. Write with reasonable speed in manuscript form

21. Write in manuscript form from dictation

22. Evaluate letter form, spacing, alignment, and margins in his/her manuscript writing in relation to his/her posture, the position of the writing paper, and the holding of the writing instrument

23. Recognize similarities and differences in manuscript and cursive letter forms

INTERMEDIATE

Level D

The student will:

*(B:6–14; C:15–23)

24. Use correct paper position for cursive writing

25. Begin to align his/her writing, using cursive form

26. Write some capital and small letters in cursive form with proper slant

27. Copy models of his/her name, words, and sentences in cursive form

28. Write with ease all capital and small letters in cursive form

29. Use correct strokes to join letters as he/she writes words in cursive form

30. Write with appropriate spacing between letters in a word and words in a sentence in cursive form

31. Write in cursive form from dictation

---

*Letter(s) and numbers refer to preceding level(s) and instructional objectives which are to be taken into consideration *before* and/or *as* the students begin to work on newly identified instructional objectives.

Level E

The student will:

*(C:19–23; D:24–31)

32. Hold and use a pen properly for cursive writing

33. Retain manuscript writing as a supplementary skill

34. Recognize and correct his/her errors in manuscript letter formation

35. Recognize and correct his/her errors in cursive letter formation

UPPER ELEMENTARY

Level F

The student will:

*(D:28–31; E:32–35)

36. Use manuscript writing when making labels and charts

37. Help others to evaluate their handwriting

38. Meet standards of legibility and speed

Level G

The student will:

*(E:32–35; F:36–38)

39. Write with proficiency in both manuscript and cursive forms

---

*Letter(s) and numbers refer to preceding level(s) and instructional objectives which are to be taken into consideration *before* and/or *as* the students begin to work on newly identified instructional objectives.

ORGANIZATION FOR HANDWRITING INSTRUCTION

As school staffs plan for schoolwide handwriting programs, they will find it helpful to identify objectives for the school, teacher, and student. The sample objectives that follow were suggested by Montgomery County classroom teachers taking the in-service course in teaching handwriting in March 1979.

SCHOOL OBJECTIVES

- Promote an attitude that legible writing is important to students and staff.
- Provide all materials needed by students and teachers for the handwriting program.
- Establish consistency in instruction for manuscript and cursive writing.
- Develop consistent standards for evaluating handwriting.
- Inform parents about student progress in handwriting.

TEACHER OBJECTIVES

- Plan a specific time for handwriting instruction.
- Maintain physical conditions that allow students to do their best handwriting.
- Provide appropriate handwriting materials for students.
- Integrate handwriting instruction into the curriculum.
- Use consistent standards when evaluating students' handwriting.
- Help students develop pride in their handwritten work.

STUDENT OBJECTIVES

- Develop and maintain good posture for handwriting.
- Use correct paper position.
- Hold the writing instrument properly.
- Form all manuscript and/or cursive letters correctly and use appropriate size, spacing, alignment, and slant.
- Recognize and use standards of legibility.

EXAMINING AND SELECTING APPROVED HANDWRITING PROGRAMS

All handwriting programs approved for use in MCPS are on the lists of approved textbooks which have been compiled by the Department of Instructional Resources. Some of these programs cover a span of skills needed from readiness to Grade 8. An annotated bibliography of these materials is included in the back of this handbook.

Prior to ordering books for your school program, you are urged to examine the various teachers' guides and students' textbooks provided through your area-based staff or those housed at the Educational Services Center in the Evaluation and Selection section of the Division of Instructional Materials.

IN EXAMINING THESE PROGRAMS

ASK YOURSELF

- ☐ Will the objectives of this series help students attain MCPS objectives in handwriting?
- ☐ Is there logical sequencing of handwriting skills?
- ☐ Do the textbooks present challenging activities that span a variety of curriculum areas and that require application of thinking skills?
- ☐ Are there many opportunities for using handwriting skills in functional reading and writing activities?
- ☐ Does the series inform teachers of supplementary instructional materials for all levels?

BEGINNING MANUSCRIPT ALPHABET*

Lower Case Letters

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BEGINNING MANUSCRIPT ALPHABET*

Capital Letters

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

BEGINNING CURSIVE ALPHABET*

Lower Case and Capital Letters

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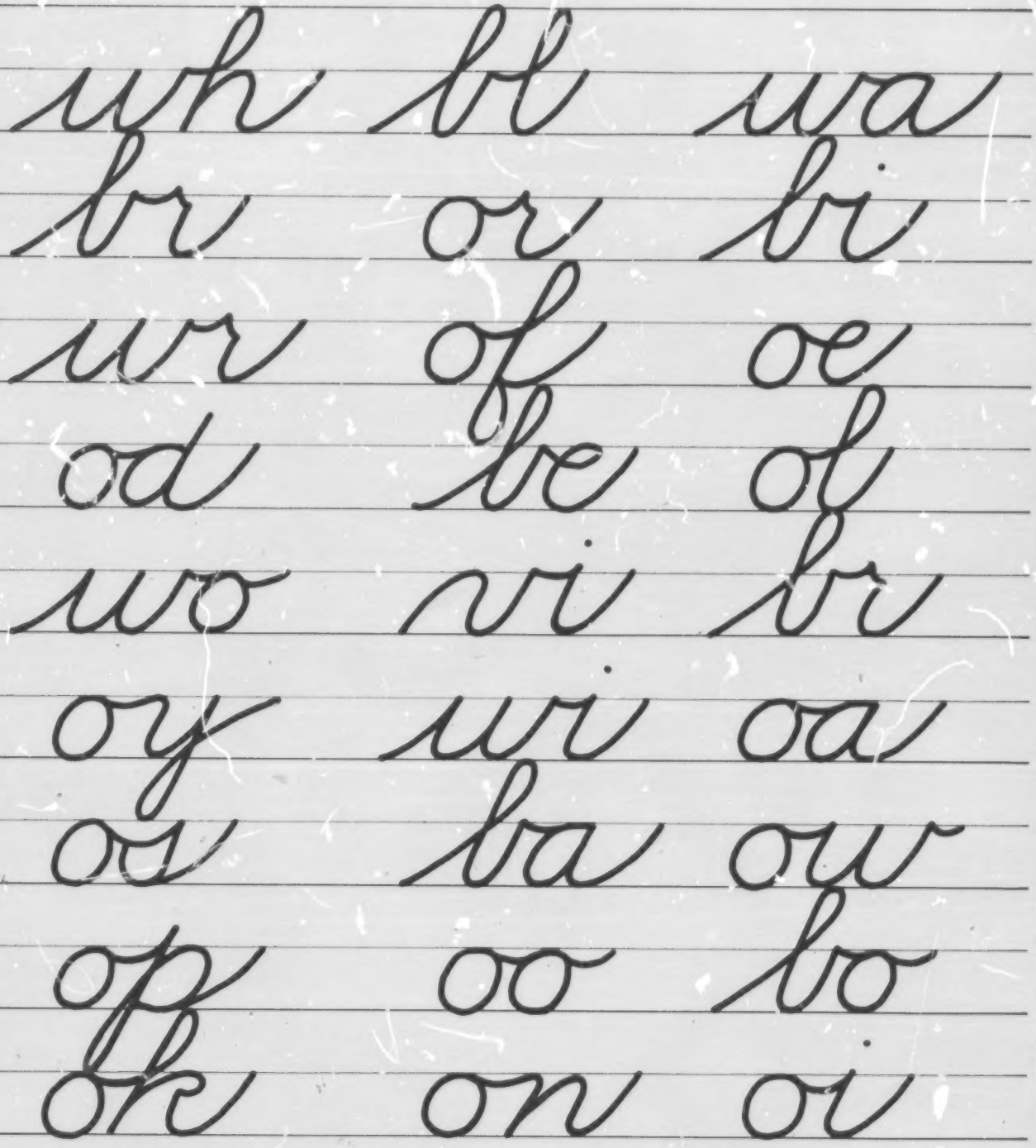
Examples of Connecting Cursive Letters Requiring Additional Attention and Practice

(Show students how the endstroke of the first letter can be a natural lead into the beginning of the second letter.)



MCPS MANUSCRIPT FORM

Beginning Manuscript Writing

Warehouse Catalog Item #

08-31-086 8½" x 14" newsprint ruled 1½" long way with ¾" faint line

1. Beginning primary children will follow this form in preparing written work.
2. Use beginner's pencil with large lead. (Warehouse catalog item #08-31-398)
3. Write the name in manuscript form to the left on the first base line. Write the date to the left on the second base line. Abbreviate the name of the month. (See sample.)
4. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
5. Keep the numerals even with the margin.
6. Write on both sides of the paper.

Beginning Cursive Writing

Warehouse Catalog Item #

08-31-077 8½" x 14" white paper ruled ¾" long way with ⅜" faint line

1. Beginning intermediate students will follow this form in preparing written work.
2. Use #2 pencil. (Warehouse catalog item #07-21-629)
3. Write the name in cursive form to the right on the first base line. Write the date directly below name to the right on the second base line. Write out or abbreviate the name of the month. (See sample.)
4. Center the title on the third base line.
5. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
6. Keep the numerals even with the margin.
7. Write on both sides of the paper.

Manuscript Writing

Warehouse Catalog Items #

08-31-083 8½" x 14" newsprint paper ruled 1" long way with ½" faint line

08-31-080 8½" x 14" white paper ruled 1" long way with ½" faint line

1. Primary children will follow this form in preparing written work.
2. Use second grade pencil with large lead. (Warehouse catalog item #08-31-101)
3. Write the name in manuscript form to the left on the first base line. Write the date to the right of the center on the first base line. Write out or abbreviate the name of the month. (See sample.)
4. Center the title on the second base line.
5. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
6. Keep the numerals even with the margin.
7. Write on both sides of the paper.

Cursive Writing

Warehouse Catalog Item #

08-31-071 8½" x 11" newsprint paper ruled ½" long way with ¼" faint line

This paper is used for *transition* to upper grade paper.

1. Intermediate students will follow this form in preparing written work.
2. Use #2 pencil. (Warehouse catalog item #07-21-629)
3. Write the name in cursive form to the right on the second line. Write the date directly below the name, to the right on the third line. Write out or abbreviate the name of the month. (See sample.)
4. Center the title on the fourth line.
5. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
6. Keep numerals even with the margin.
7. Write on both sides of the paper.

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Cursive Writing

Warehouse Catalog Item #

08-31-062 8½" x 11" newsprint paper ruled ⅜" short way

1. Upper elementary/middle school students will follow this form in preparing written work.
2. Use #2 pencil. (Warehouse catalog item #07-21-629)
3. Write the name in cursive form to the right on the second line. Write the date directly below the name, to the right on the third line. Write out or abbreviate the name of the month. (See sample.)
4. Center the title on the fourth line.
5. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
6. Skip a line.
7. Keep numerals even with the margin.
8. Skip the last full space.
9. Write on both sides of the paper.

Cursive Writing

Warehouse Catalog Item #

08-31-068 8½" x 11" white paper ruled ⅜" short way

1. Upper elementary/middle school students will follow this form in preparing written work.
2. Use ball point pen. (Warehouse catalog items #07-21-600—black ink, or 07-21-596—blue ink)
3. Write the name in cursive form to the right on the second line. Write the date directly below the name, to the right on the third line. Write out or abbreviate the name of the month. (See sample.)
4. Center the title on the fourth line.
5. Maintain a 2.5 centimeters (one inch) (two-finger width) margin on the left and a 1.4 centimeters (one-half inch) (one-finger width) margin on the right.
6. Skip a line.
7. Keep numerals even with the margin.
8. Skip the last full space.
9. Write on both sides of the paper.

Lee Anh

Nov. 3, 19__

1.

2.

Anna Rios May 10, 19__

Title

1.

2.

3.

4.

5.

John Barker
September 10, 19—
Title

1.

2.

3.

4.

5.

6.

Terry Jones

Oct. 15, 19—

Title

1.

2.

3.

4.

Jane Lunto
September 10, 19—

Title

1.
2.
3.
4.
5.
6.
7.
8.

Doris Wilson
September 10, 19—

Title

1.
2.
3.
4.
5.
6.
7.
8.

MANUSCRIPT FORM

Secondary Public Schools
of
Montgomery County, Maryland

1. All secondary students will follow this form in preparing their school work.
2. Use wide-lined paper approximately 8½ by 11 inches in size.
3. Use blue, blue-black, or black ink. At the discretion of the teacher, pencil may be used for mathematics and other classes or tasks for which it is particularly desirable.
4. You may write on both sides of the paper except for formal composition work and tests.
5. In block form write your name, the date, the subject, and the period in the upper right-hand corner. On each additional sheet put your name only in the same position. Write out or abbreviate the name of the month. (See sample on the back of this sheet.)
6. Maintain a one-inch margin on the left and a one-half inch margin on the right. Do not divide words incorrectly to maintain the right-hand margin. Skip the last full line.
7. Center the title on the first line.
8. Skip a line and begin, starting at the margin for sentences which are numbered. Indent one inch from the left margin rule for paragraphs.
9. Your teacher will tell you whether to turn in papers flat or folded. If papers are to be folded, place the identification (No. 5) on the back of the paper on the first three lines.
10. Number items neatly just to the left of the left-hand margin rule.
11. Number each sheet of paper after the first.
12. Double-space typewritten work.
13. Use paper clips to fasten pages together, or fasten as directed by the teacher. Do not tear corners to fasten pages together.
14. Use the form for bibliography which your school has adopted for use.

MCPS Form 301-1, Revised September 1977

John Jones
September 10, 19____
English III Period 5

Title

Skip this line.

1.

2.

Skip the last full line.

READINESS FOR HANDWRITING

Important to the readiness for handwriting are experiences that will help to develop eye-hand coordination and sharpen the perception of form. The teacher should observe and keep a record of each child's coordination and handedness in order to begin an individualized and well-balanced program in handwriting.

Some activities for determining coordination, handedness, and perception are:

1. Bouncing and throwing a ball
2. Tossing a deck ring
3. Rolling a ball or marble
4. Tossing a bean bag
5. Stringing beads
6. Hitting a paper ball with one hand
7. Painting a picture with a brush
8. Drawing on the chalkboard
9. Connecting dot-to-dot pictures
10. Cutting with scissors
11. Tracing letters and shapes
12. Drawing shapes and coloring them
13. Putting puzzles together
14. Drawing and coloring a picture
15. Picking up objects while counting them
16. Putting pegs in a pegboard
17. Building with blocks
18. Opening a door
19. Picking up a toy
20. Winding a toy
21. Reaching for a toy
22. Playing a game of pick-up sticks

23. Peeling an orange

24. Eating or drinking at snack time

25. Picking up small objects such as beans or buttons between thumb and forefinger

26. Painting with Q tips

27. Tying bows; using zippers, buttons, hooks, snaps

28. Clipping spring clothespins to a line or rim of a can (This can be used as a race.)

It is also important for children to have much practice in left-*to*-right and left-*from*-right activities. For example, the teacher should always stand at the left of a series of pictures and swing through with the hand from left to right. The same applies to standing at the left of the chalkboard or chart and moving to the right as something is being written.

Other reinforcing activities might consist of saluting the flag with the right hand; shaking hands with the right hand; holding up the hand called for in games; and playing games such as Simon Says, Looby-Loo, and Hokey-Pokey.

Additional factors which may indicate readiness for writing are:

Speaking in short, clear sentences

Relating ideas in sequence

Dictating simple stories

Sitting attentively for short periods of time

Following one-step directions

Using paint brushes, chalk, and crayons with ease

Reading charts and/or pre-primer materials with ease

Attempting to record own ideas

Children should also be made aware of the importance of writing as they see names, captions, signs, and labels, as well as recorded stories and printed materials.

By the same token, children should have a purpose for writing; and handwriting instruction should take place in the context of meaningful words.

On such a worksheet, the teacher may record observations when determining handedness.

CHECKLIST FOR HANDEDNESS

R—Right hand was used.
L—Left hand was used.

Student	Behaviors														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.															
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															

On such a worksheet, the teachers may list observable behaviors to help to determine handedness. This sheet may be used with the Checklist for Handedness (see previous page).

OBSERVABLE BEHAVIORS FOR HANDEDNESS

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

BASIC RULES FOR GOOD HANDWRITING

In handwriting instruction, it is essential to develop good handwriting habits from the very beginning. These habits should be reinforced throughout the developmental years of the handwriting program. A child should be taught how to stand at the chalkboard, sit at a desk, place the paper on the desk, and hold the writing instrument properly.

AT THE CHALKBOARD

Practice at the chalkboard is an important part of the handwriting program; therefore, at least a portion of the chalkboard should be lined in all classrooms. The lines on the chalkboard should be spaced 5 centimeters (2 inches) apart.

Good handwriting habits should be emphasized when children and teachers work at the chalkboard.

HOLDING THE CHALK

For both the left-handed and the right-handed child, the chalk should be held lightly in the writing hand between the thumb and the first two fingers. The remaining fingers should rest gently on the end of the chalk.

PENCIL GRIP

The right-handed writer should be taught to hold the writing instrument about 2.5 centimeters (1 inch) above its point. The writing instrument should be held between the thumb and the first two fingers, placing the second finger under the writing instrument for support.

The left-handed writer should be taught to hold the writing instrument about 4 centimeters (1-1½ inches) above the point. The writing instrument should be held between the thumb and the first two fingers, placing the second finger under the writing instrument for support.

In order to prevent tension and a tight grip, the writer should hold the writing instrument loosely, keeping the writing hand below the line of writing. This is especially important for the left-handed writer.

STANDING AT THE CHALKBOARD

The child should stand parallel with the chalkboard, facing it, and far enough from the chalkboard so that there is freedom of arm movement.

The child's elbow should be close to the bodyline, and the child should write at eye level, walking from left to right so that the letters are aligned.

SITTING AT THE DESK

Furniture should be adjusted so that each child is properly seated at the writing area. Desks for left-handed writers should be slightly lower than for right-handed writers.

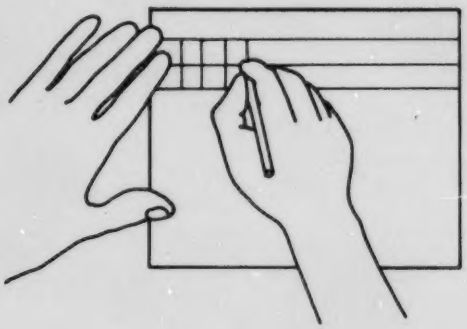
Children should be seated so that lighting is sufficient and does not make a glare on their papers. The best light for a right-handed person will come over his/her left shoulder and for a left-handed person, over his/her right shoulder.

POSTURE

Children should sit comfortably, but erect: hips should touch the back of the chair and shoulders should be slightly forward; feet should be flat on the floor; both arms should rest on the desk at an equal distance from the body.

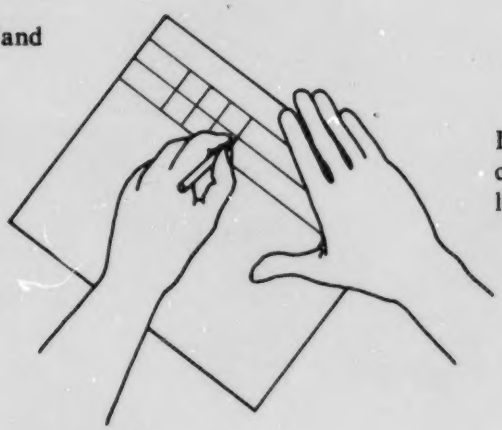
MANUSCRIPT PAPER POSITION

Right Hand



Paper is straight on writing surface, the lower edges parallel with the lower edges of the desk. Downstrokes are pulled toward the center of the body.

Left Hand



Lower right corner of paper points to the left of the center of the body. Downstrokes are pulled toward the left elbow.

MANUSCRIPT

Until 1913, schools both here and abroad taught nothing but cursive writing to young children. Then an Englishman, Edward Johnson, suggested to London teachers that lowercase letters might be useful in instructing these children. Teachers experimented and quickly discovered that beginners used manuscript writing successfully because of the similarity of manuscript letters to printed letters.

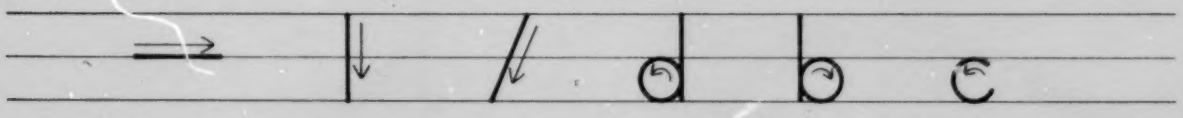
Manuscript writing facilitates learning to read. It also facilitates learning to write out one's ideas independently. It gives a child time to develop power of independent expression while remaining relatively undisturbed by the mechanics of the handwriting act.

While most educators will agree on manuscript writing as a starting style, there is a diversity of opinion as to whether one should teach handwriting incidentally when a purpose for writing arises, or whether primary teachers should offer developmental instruction during specific handwriting periods. In MCPS, it is generally agreed that students benefit most from systematic and sequential instruction followed by practice and reinforcing activities. The first letters should be taught in the context of a word. At other times, the letters should be singled out for practice and then fitted back into the word again.

The sample alphabets should be used as guides to show teachers and children the basic strokes involved in forming each letter.

MANUSCRIPT LETTER FAMILY GROUPINGS

The basic strokes in manuscript writing are horizontal, vertical, and slanted lines; circles; and part circles.

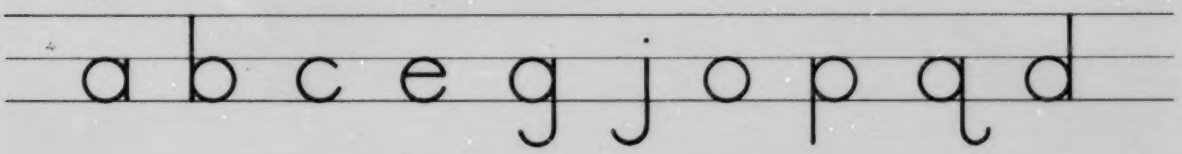


Because many letter forms are related, practicing letters in family groups helps to improve the way letters are formed. The writing instrument and the paper used should be appropriate to the needs and grade levels of the students.

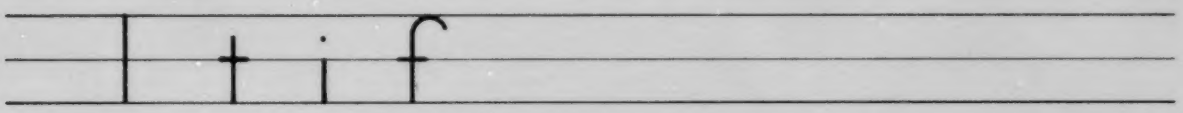
Letter families are shown to suggest groupings for handwriting instruction. In these groupings, there is a similarity of strokes.

The use of groupings as *diagnostic tools* will give students practice in forming a series of letters which belong to the letter families with which the student may be having problems.

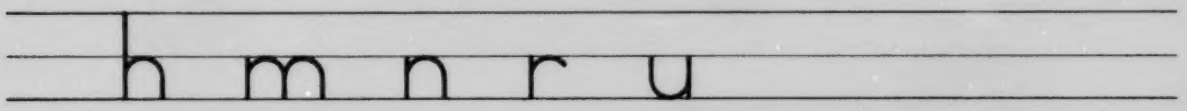
LOWERCASE CIRCLE LETTERS



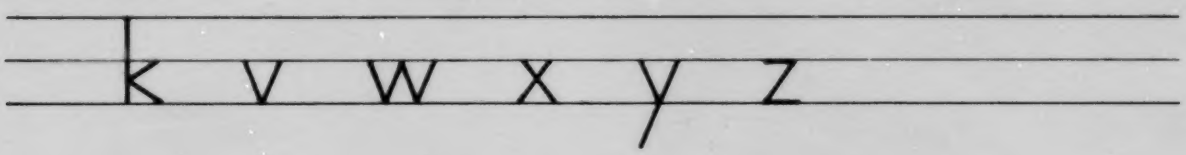
STICK LETTERS



HUMP LETTERS



SLANT LETTERS



COMPOUND CURVE

S

UPPER CASE CIRCLE LETTERS

C G O Q

STICK LETTERS

E F H I L T

SLANT UPPERCASE LETTERS

A K M N V W X Y Z

PART CIRCLE LETTERS

B D J P R U

NUMERALS

1 2 3 4 5 6 7 8 9 0

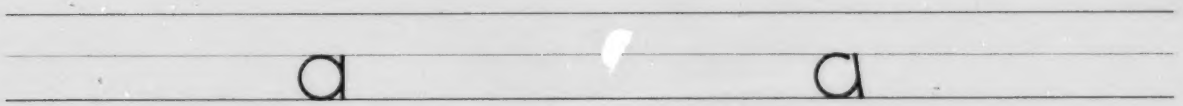
EVALUATION AND DIAGNOSIS

It is important that teachers and children make daily use of criteria and tools for evaluating and diagnosing handwriting for legibility. The purposes for which the handwriting is being done should be taken into consideration. Such purposes will determine whether everyday, personal, or formal handwriting is to be used.

There are several components to be considered in evaluating and diagnosing handwriting problems.

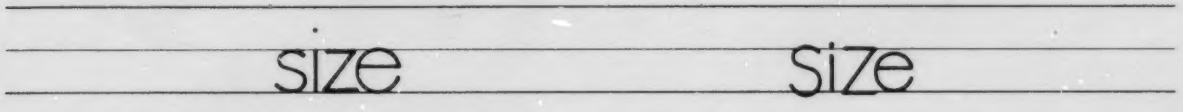
- size and proportion
- alignment
- slant
- spacing
- line quality
- speed

LETTER FORM — Using a letter form that is widely accepted as correct



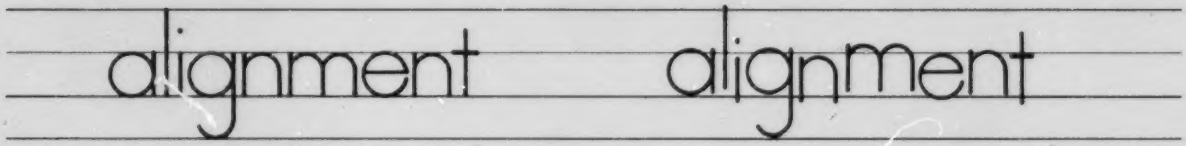
correct incorrect

SIZE AND PROPORTION — Appropriate use of space



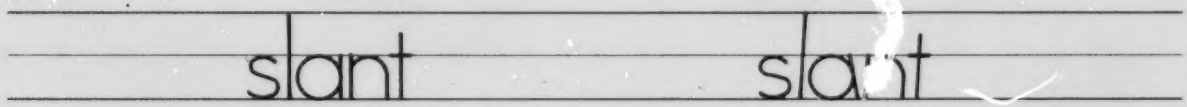
correct incorrect

ALIGNMENT — Placement of letters in their correct position or place on the baseline



correct incorrect

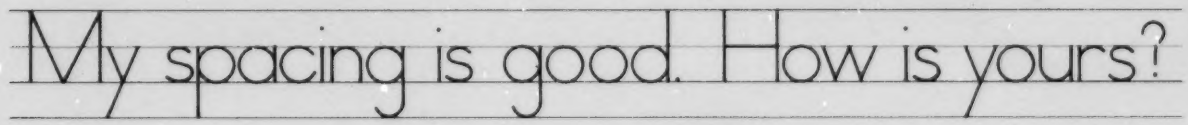
SLANT — Vertical downstrokes in manuscript writing; parallel downstrokes in cursive writing



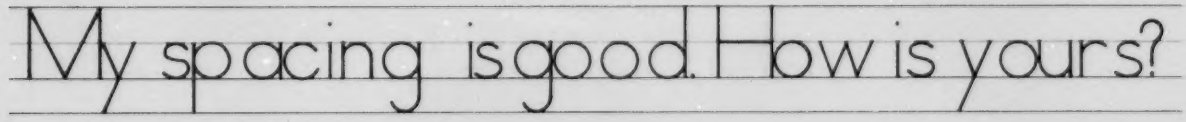
correct incorrect

SPACING — Appropriate distance between letters, words, groups of words, and lines of writing

The widest space is between straight-line letters. The next widest space is between a circle and a straight-line letter. The smallest amount of space is between two circle letters. The spacing of words should be greater than the spacing of letters. The spacing of groups of words or sentences should be greater than the spacing of words.

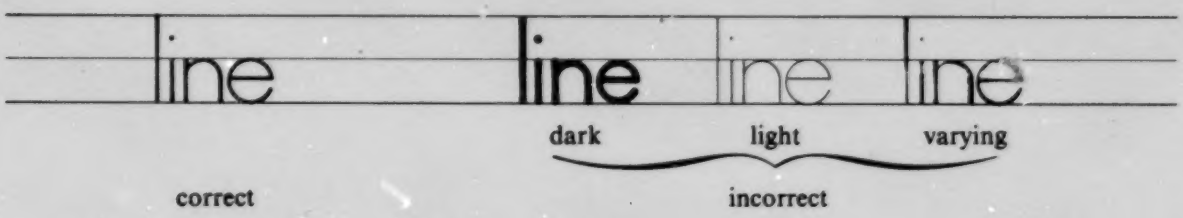


correct



incorrect

LINE QUALITY — Writing that is not too light, not too dark, nor uneven in color



SPEED — The rate at which one writes

These sentences contain all the letters of the alphabet. They can be used for practice and to diagnose manuscript writing problems.

The queen and king wore fuzzy slippers when jumping over the cardboard box.

Foxy Sam Zox eats very green carrots while sipping squash juice for breakfast, lunch, and dinner.

It was not until daylight that the very dizzy farmer spied the jumpy old fox by the square chicken coop.

Messy Flo and Junky Bo quickly ate cooked popcorn while looking at the crazy TV box.

"Let's take one day at a time," the grumpy lady said as she took very quick steps in her foxy jumpsuit and fuzzy walking boots.

The seamstress fixed a new zipper on the jumpy, crazy, quick kangaroo's pocket to hold her valuable baby.

SAMPLE EVALUATION FORMS

These sample forms may be used by teachers and/or students to evaluate the manuscript handwriting progress.

Sample 1

Student _____ Date _____

Elements of Legibility	O	S	N	Comment
Letter Form				
Size and Proportion				
Alignment				
Slant				
Spacing				
Line Quality				

O = Outstanding S = Satisfactory N = Needs Improvement

Sample 2

Manuscript Handwriting Evaluation

Student			Teacher	
Yes	No		Yes	No
		Letter Form		
		Size and Proportion		
		Alignment		
		Slant		
		Spacing		
		Line Quality		

Sample 3

Yes	No	Manuscript Self-Evaluation
		1. My letters are made correctly.
		2. My letters are the correct size.
		3. My letters are correctly on the baseline.
		4. My letters are straight up and down.
		5. My letters, words, and sentences are correctly spaced.
		6. My letters are not too light, not too dark, nor uneven.

TRANSITION

Not all children will be ready at the same time for the transition to cursive writing. The child with poor motor coordination should continue to use manuscript writing as long as it serves his/her needs. Children are usually seven, eight, or even older before they have the necessary coordination for cursive writing. When the child is ready to make the transition, cursive writing must be taught as another writing skill.

There are several general evidences of readiness for cursive writing.

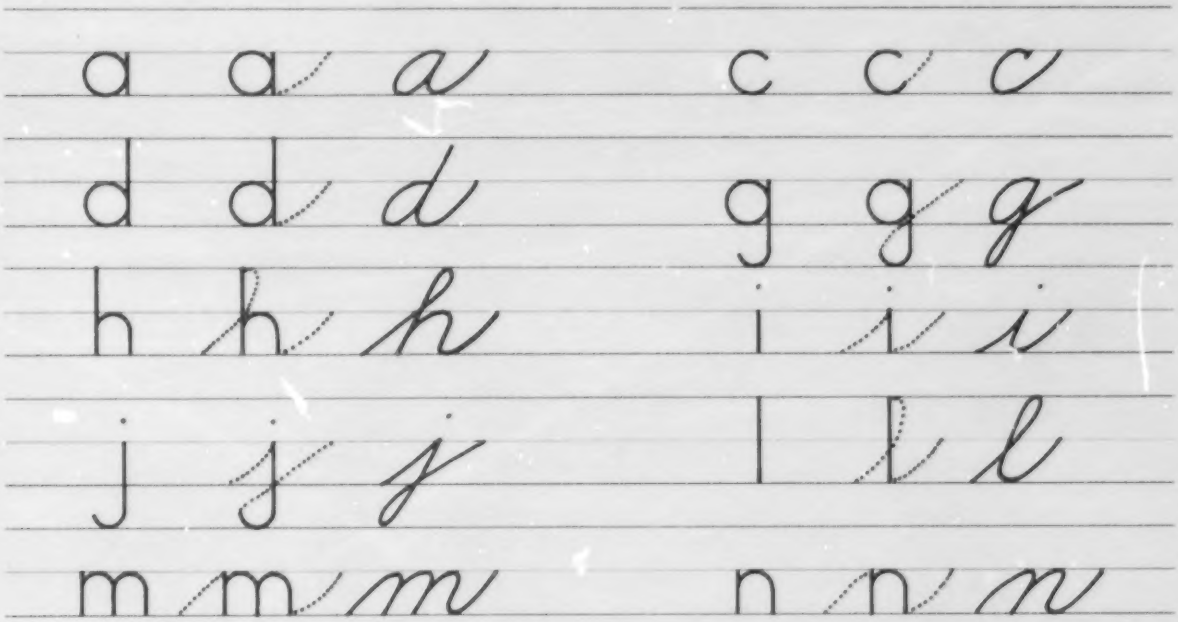
- the tendency to slant letters and to form some loops and connecting lines
- the ability to write from memory all letters of the manuscript alphabet
- coordination of the muscles of the fingers, hand, and arm
- the desire of the student to write in cursive
- the ability to read simple sentences written in cursive

During the period when the teacher is developing readiness for the transition to cursive writing, the cursive alphabet strips should be placed above or below the manuscript strips. Opportunities should be provided for the children to observe likenesses as well as differences between the two alphabets.

In this section you will find samples illustrating the transition from manuscript to cursive writing.

The Transition from Manuscript to Cursive Writing

These letters are almost the same in manuscript and cursive:



o o o p p p

q q q t t t

u u u

These letters change slightly:

v v v w w w

y y y

These letters change significantly:

b e f k r s z

b e f k r s z

x x x

SAMPLE LESSON PLAN

Objective: When given a letter name and model, the children will write the stick letters *l, i,* and *t* and the word *lit.*

Materials:

- lined section of the chalkboard and chalk
  or
- overhead projector and lined transparency
- marker
- 8½" x 14" white paper ruled 1½" with ¾" faint line
- beginners' round primary writing pencil (large lead 13/32")

Small Group: approximately 6-8 children for beginning manuscript writing

Procedure: Review with the children the correct posture and paper positions (left-handed and right-handed). Review the vocabulary words *headline, midline,* and *baseline.* Introduce, explain, and demonstrate the new word.

Ask for examples of a vertical line.

Show the model of the letter *l* from the wall chart. Demonstrate making the letter on the chalkboard or overhead projector by explaining: "The *l* is a vertical line from the headline to the baseline." Have the children write the letter *l* on their papers. Demonstrate spacing between letters by telling the children to use two fingers between each letter. Make the letter again, using this spacing. Observe as the children fill the line with the letter *l.* It is important to circulate among the children to note any difficulties they may be encountering and to give individual help when needed.

Demonstrate the letters *i* and *t* in the same way, making sure that the letters are begun in the correct place.

After all letters have been introduced and practiced, ask the children whether a word can be written by using each of the letters once. The children should say yes and identify the word *lit.* Demonstrate the writing of the word. Tell the children to use the forefinger to measure spacing between *letters* and the first two fingers to measure spacing between *words.*

At the end of the lesson, review the objective and have children evaluate their work.

CURSIVE

Cursive writing should be introduced when — and only when — a child is ready. This generally occurs at the end of the second grade or the beginning of the third grade. Cursive writing should not be a substitute for manuscript writing; rather, it should be an additional learned skill. One of the most important objectives of cursive writing is for the student to be able to write whole words without lifting the pencil from the paper.

Initial learning in cursive writing is best achieved through small group instruction of a specific skill. Since handwriting proficiency will not prosper through incidental learning, practice should be systematic. Letters and words should be chosen on the basis of difficulty. A given element of performance should be repeated often enough to take advantage of the cumulative effect of practice.

At the same time that students are learning the new letter forms and techniques of cursive writing, they will continue to use manuscript for their daily assignments. This will enable them to be free to concentrate on what they are writing, rather then being distracted by the new letter forms and the movement required in making them.

After the basic skills of cursive writing have been established, the teacher should assist the students in writing their names in cursive form. After individual and small group instruction has been given, each student should be provided with a carefully written name-card.

Cursive writing is preferable for older students as it is evident that less time and effort are required to slide from symbol to symbol than to stop the writing motion, lift the writing instrument, find another beginning point, and then move again often in an entirely different direction. The qualities that make manuscript writing desirable for younger students make it less desirable as the more mature student's exclusive recording tool.

SPEED IN WRITING

Intermediate students, who deal with a heavier concentration of subject matter, will soon establish a need for some speed in writing. Regardless of when in the instructional program the concept of speed is introduced, a high concern for legibility should be maintained. *Excessive* speed causes deterioration in the quality of the finished product. Freedom from physical tension is likely to facilitate increased speed without loss of legibility. Encourage good posture and the correct handling of the writing instrument.

Speed in writing should never be emphasized until basic letter forms are so well established that the writing act becomes automatic.

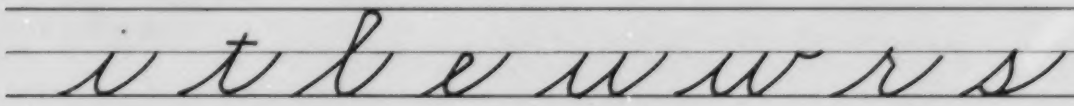
This is a guide to show suggested speed attainments by grade levels.

Grade	Letters per Minute
1	5-10
2	20-30
3	30-40
4	40-50
5	50-60
6	67
7	74
8	80

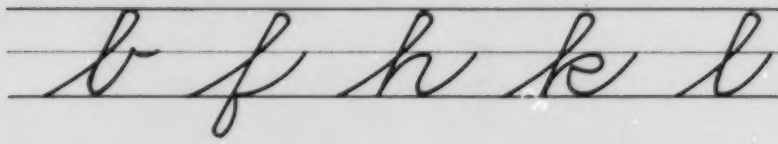
CURSIVE LETTER FAMILY GROUPINGS

An examination of cursive writing shows that each letter is related to another letter. Letter families are shown to suggest groupings. Practicing the letters in these groupings helps to improve letter formation.

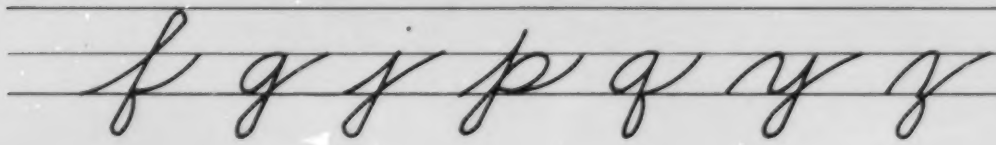
LOWERCASE UNDERCURVE



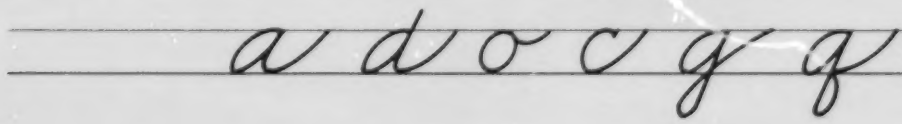
LOWERCASE UNDERCURVE WITH UPPER LOOP



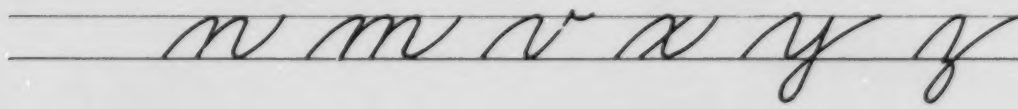
LOWERCASE UNDERCURVE WITH LOWER LOOP



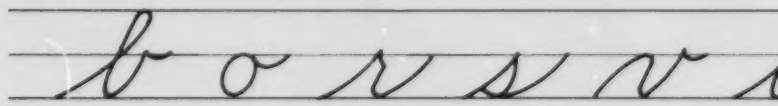
LOWERCASE DOWNCURVE



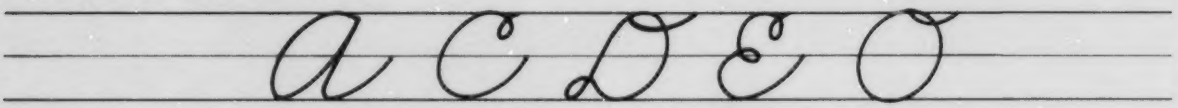
LOWERCASE OVERCURVE



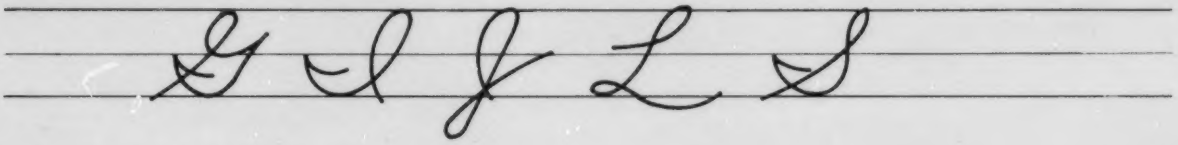
LOWERCASE CHECK STROKE



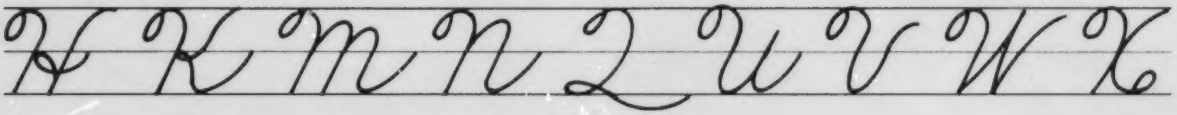
UPPERCASE DOWNCURVE



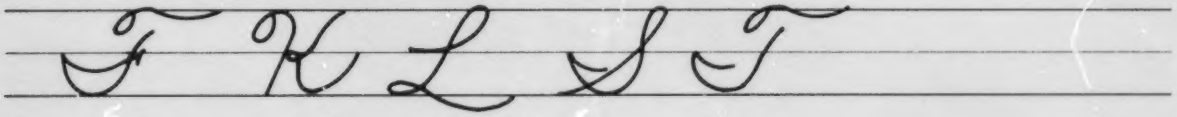
UPPERCASE UPPER LOOP



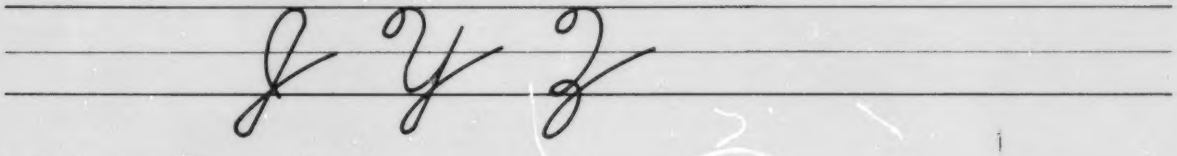
UPPERCASE CANE STEM



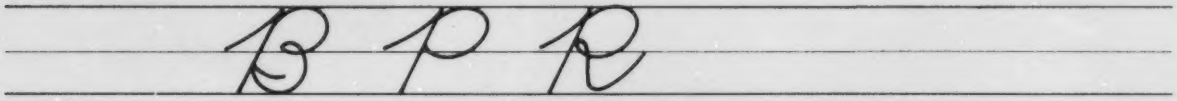
UPPERCASE DOUBLE CURVE



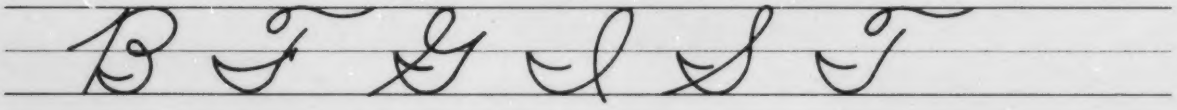
UPPERCASE LOWER LOOP



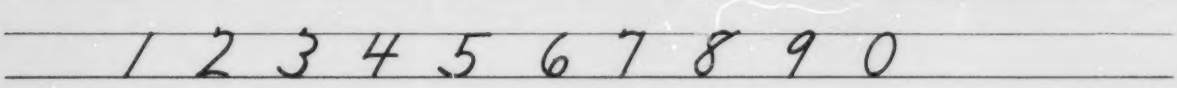
UPPERCASE FORWARD OVAL



UPPERCASE BOAT



NUMERALS

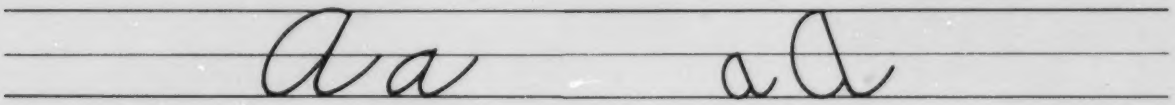


EVALUATION AND DIAGNOSIS

There are several components for evaluating cursive handwriting and diagnosing cursive handwriting problems:

- Letter form
- Size and proportion
- Alignment
- Slant
- Spacing
- Line quality

LETTER FORM — Using a letter form that is widely accepted as correct



correct incorrect

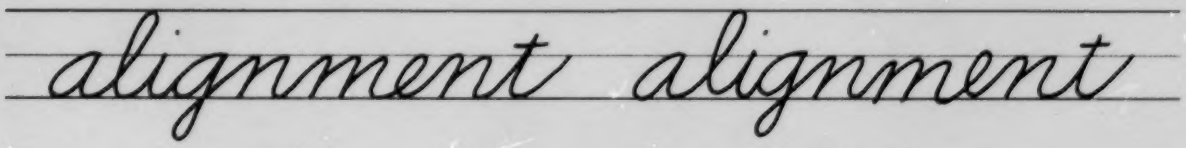
SIZE AND PROPORTION — Appropriate use of space

correct incorrect

When students make the transition to cursive, the size and proportion of the letters remain the same as manuscript letters. Letters such as the lowercase *a* are from the midline to the baseline; semi-tall letters are from midway between the midline and headline to the baseline; tall letters are from the headline to the baseline.

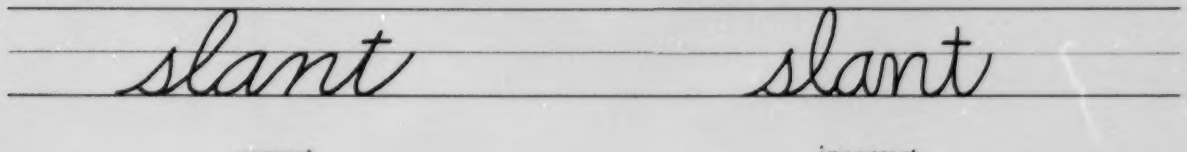
Numerals are the same as the lowercase *a*.

ALIGNMENT — Writing letters in their correct position or place on the baseline



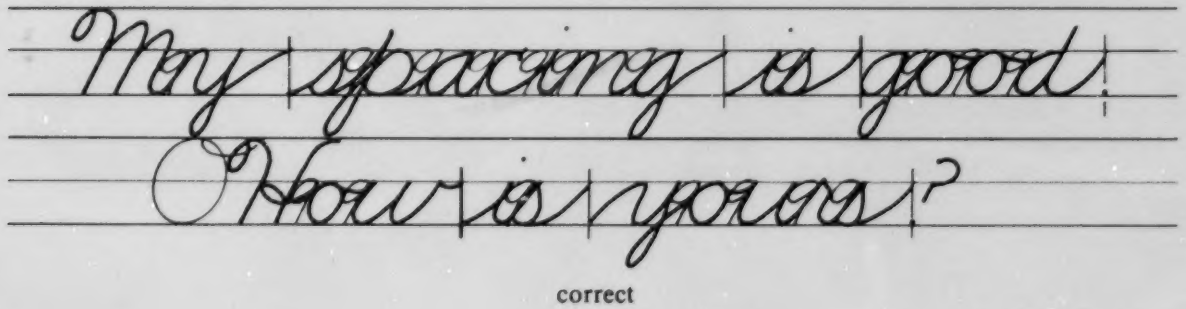
correct incorrect

SLANT — Vertical downstrokes in manuscript writing; parallel downstrokes in cursive writing

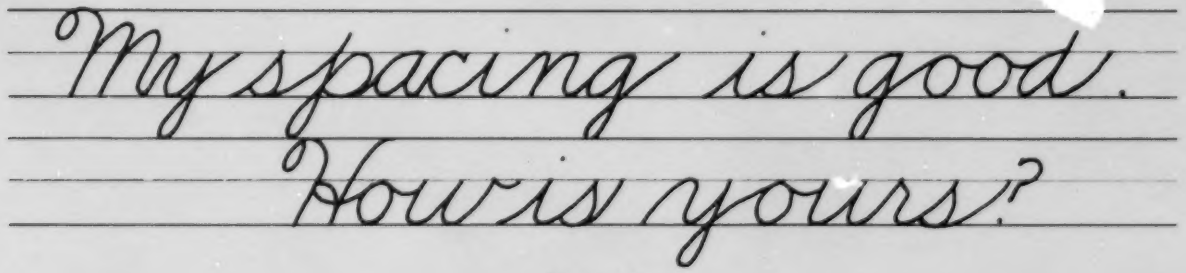


correct incorrect

SPACING — Appropriate distance between letters, words, groups of words, and lines of writing



correct

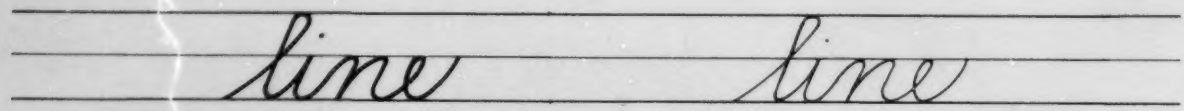


incorrect

The oval part of the 9 can be used to measure spacing between letters. A vertical line can be drawn to measure spacing between the ending stroke of a word and the beginning stroke of the next word. An uppercase O can be placed between sentences to measure spacing.*

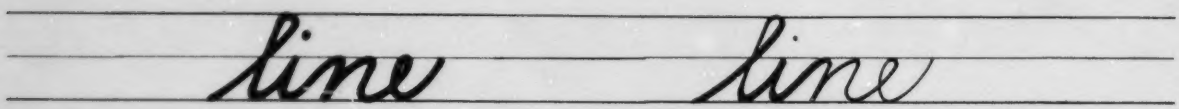
*from *Elements of Legible Cursive Handwriting*, Zaner Bloser, Inc., Columbus, Ohio, Copyright 1979

LINE QUALITY — Writing that is not too light, too dark, nor uneven in color



correct

too light



too dark

uneven

SPEED — The rate at which one writes

It is most important that teachers help students evaluate their own handwriting, using the evaluation guidelines outlined in the manuscript and cursive sections of this handbook. Evaluation should be made of the specific skills being emphasized. By evaluating their own handwriting, students can discover their errors and focus on correcting them.

As the students reach the successive levels of proficiency, the letter sizes will decrease proportionately. By the time the students are ready for adult-size cursive, letters do not touch the headline. Letters such as the lowercase *a* will fill one-third of the space; semi-tall letters will fill two-thirds of the space; descender letters will fill two-thirds of the space below the baseline.

SUMMARY

The importance of developmental handwriting cannot be overemphasized. Schoolwide objectives should be developed and implemented in the total school program. From the schoolwide objectives, teachers and students should develop their own objectives to insure that legibility in handwriting is an ongoing process.

These sentences were developed by a combined fifth/sixth grade class in the Montgomery County Public Schools. They contain all the letters of the alphabet. They can be used to practice cursive letter forms and to diagnose cursive writing problems.

Kevin Quack went to the zoo with Robin Jaxy to paint Michael Lemon's giraffe gold.

Mabel Zox walked a lazy dog to the grocery for her friend Jumper Quavack.

Janet, the young girl, jumped backwards over the queen's cat, Zufulrex.

Judge Kazowy died quietly on the x-ray machine Friday before going to his violin, ukelele, and piccolo lessons.

The brown ox zigzagged very quickly through the castle, jumping under the frost-free refrigerator.

SAMPLE EVALUATION FORMS

These sample forms may be used by teachers and students to evaluate cursive handwriting progress.

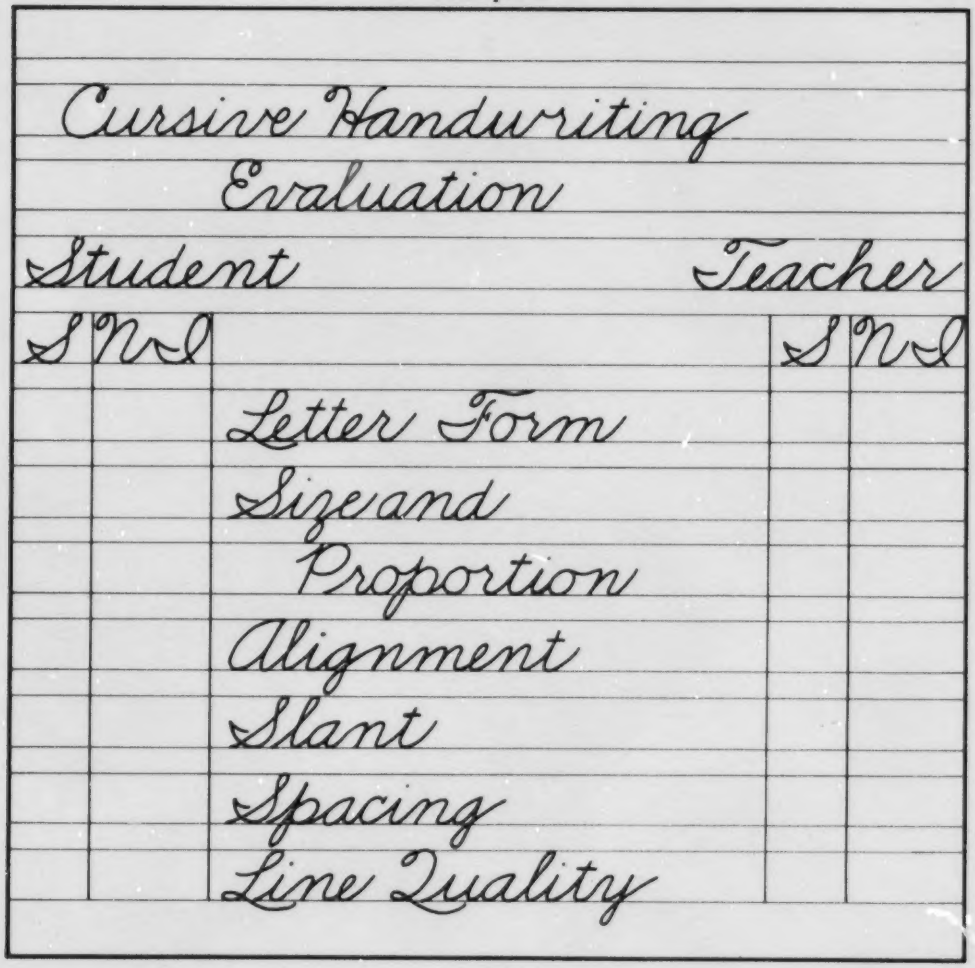
Sample 1

Student

Elements of Legibility	S	U	Comment
Letter Form			
Size and Proportion			
Alignment			
Slant			
Spacing			
Line Quality			

S = Satisfactory U = Unsatisfactory

Sample 2



Yes	No	Cursive Self-Evaluation
		1. My letters are made correctly.
		2. My letters are the correct size.
		3. My letters are correctly on the baseline.
		4. My letters have the proper slant.
		5. My letters, words and sentences are correctly spaced.
		6. My letters are not too light, not too dark, nor uneven.

SAMPLE LESSON PLAN

Objective: When given a letter name and model, the students will write the lowercase undercurve letters *i* and *t*, and the word *it*.

Materials:

- chalk
- lined section of the chalkboard
  or
- overhead projector and lined transparency
- marker
- 8½" by 14" white paper ruled ¼" with ⅛" faint line
- #2 pencil

Small Group: Approximately 10 students for beginning cursive writing

Procedure: Review with the students the correct posture. Introduce the correct paper positions (left-handed and right-handed) for cursive writing. Review the vocabulary words *headline, midline, baseline*, and *vertical line*. Introduce, explain, and demonstrate the new vocabulary words *undercurve* and *slant*.

Attach the undercurve stroke to the vertical line to make the cursive *i*. With the wall chart, show that the cursive *i* has a slant. This slant is achieved by the position of the paper on the desk.

Demonstrate the cursive *i* on the chalkboard or overhead projector. Ask the students to make this letter on their papers. Tell the students they are to use the oval part of an imaginary 9 to measure spacing between letters. Demonstrate this, and make another cursive *i*. Have the students complete practicing the cursive *i*, using the correct spacing.

Using the same procedure, introduce the cursive *t*. Be sure to note where the cursive *t* is crossed.

Put these letters together to write the word *it* in cursive on the chalkboard or overhead projector. Let the students write this word on their papers.

It is important throughout the lesson to circulate among students to note any difficulties they may be encountering and to offer individual help when needed.

At the end of the lesson, review the objective and evaluate students' work.

THE LEFT-HANDED STUDENT

Before beginning a formal program of handwriting, it is important to determine the student's dominance. An extensive list of suggested activities for determining handedness can be found in the section Readiness for Handwriting on page

Research has shown that approximately five to ten percent of the population is left-handed. While most authorities agree that children should be encouraged to use one hand consistently, rather than to develop ambidexterity, these authorities also feel that natural left-handed dominance should be allowed to evolve.

When left-handedness has been determined in a child, remember to:

1. Seat left-handed students so that light shines over the right shoulder in order to minimize shadows on the paper.

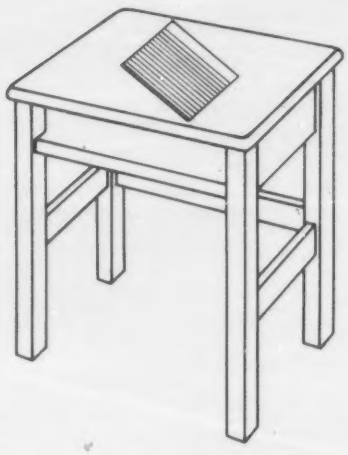
2. Leave sufficient space on the ieft side when making seating arrangements. If armchair desks are used, provide students with the correct type of desk.

3. Provide students with near point models to be kept at their desks for easy reference.

4. Seat left-handed children together during handwriting instruction so that they can model from and help one another.

5. Allow additional time for left-handed students to learn and to use writing skills.

6. Insist on the correct placement of paper on the left-handers' desks. Position it in the same way for both manuscript and cursive writing.

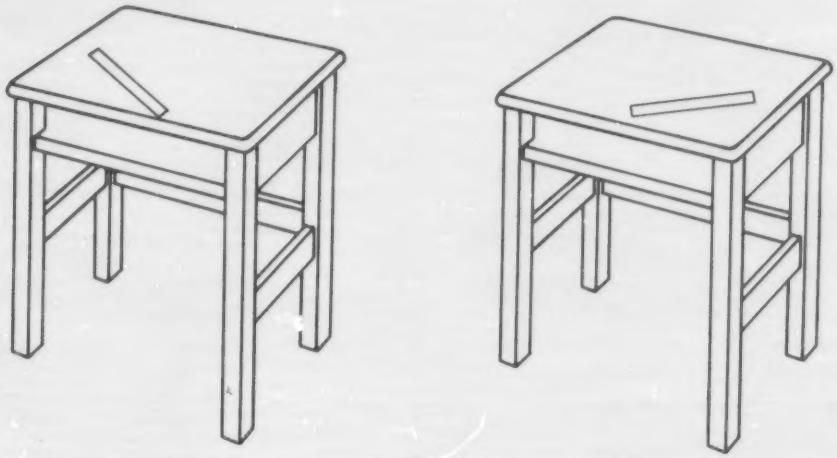


The lower right corner of

the paper points to the left

of the center of the body.

7. Use masking tape to make an angled line on the desk to show the student how to place the paper so that correct alignment of letters takes place. A slant line may be drawn diagonally across the desk with a washable marker. The student must move the paper as he/she writes to keep it on the line. The same techniques are helpful for right-handed students, for whom the line would be drawn or the tape angled in the *opposite* direction from those shown.



8. Have students in Grades 4 through 8 use pencils or ball-point pens, rather than fountain pens, since left-handers use more pushing than pulling movements.

9. If the writer has been grasping the writing instrument too tightly, have him/her hold a ball of paper inside the hand when writing.

10. Use one or more of these suggestions to help prevent the left-handed students' hooking their wrists as they write.

    a) Hold the writing instrument farther from the point than right-handers hold theirs (4cm or 1½").

    b) Extend the elbow off the edge of the desk.

    c) Keep the elbow fairly close to the body, and pull strokes toward the elbow.

NOTE: The inclusion of these additional hints for left-handed writers was not intended to single out these students as being different or unusual but rather to provide for the uniqueness which students bring to the learning situation.

It might be helpful for the right-handed teacher, in order to experience some of the problems encountered by left-handed students (smudging, having difficulty seeing what has been written, writing more slowly, etc.) to practice writing on paper and chalkboard with his/her left hand.

REMEDIATION

Specific remedial techniques can be found after each element of legibility in the Developmental Handwriting section of this handbook. However, it is important to realize that consistent, severe deficits in handwriting may be indicative of more complex learning disabilities. When a student demonstrates serious difficulties with handwriting, the student should be referred for further evaluation.

Some students may require tactile reinforcement in the form of sandpaper letters or another textured medium — b-d, Ss, or N reversals are the three most common problems.

Children who have firmly established left-to-right directionality seldom have reversal problems. Most children make some reversals in beginning writing. As the child matures in perception, the problem usually disappears. Often the transition to cursive writing in third grade eliminates reversal tendencies.

REVERSALS

1. Minimize unsupervised writing by the student.
2. Provide a near point model from which to copy.
3. Avoid having the student write from memory.
4. Point out the differences in letters to the student.
5. Single out problems words for practice; e.g., was — saw.
6. Use lined chalkboards.
7. Begin at the far left side when writing on the chalkboard.
8. Make the first letter of the word in a contrasting color.
9. Underline the first letter of words that are confused with each other.
10. b-d reversals: (Remedial instruction times should be separated by a week or more in order to minimize difficulties.)

    Start with *d* — teach *o* first, then *a*, then *d*.

    Avoid *b* words at this stage.

    Use *d* in many words.

    Establish the place of *d* in the alphabet. (What letter comes *before* d? What letter comes *after* d?)

    Associate the sound with letters as words are reviewed.

    Use colored chalk on board or colored magic marker on tag to make visual aid or large cutouts.

    Review *o, a, d* often.

    Point out that *c* come before *d* in the alphabet and that you make a *c* (then add a stick or undercurve) first when forming the letter *d*. When using this technique, instruct the student to form the letter *d* in one continuous stroke without lifting the pencil from the paper.

Make the "thumbs up" sign with both hands in front of your body. The left hand forms the outline of a *b* and the right hand a *d*.

Write the word *bed* and draw a bed around it, using the *b* as the headboard and the *d* as the footboard.

Superimpose small *b* over capital *B* with colored chalk to reinforce sameness of directionality.

Alternate making small *b* and capital *B*. Bb Bb Bb

Strongly associate *b* with *b* words.

Trace flocked or sandpaper letters.

11. For *S* reversals, try series of umbrellas.

    Alternate *c*'s with *s* to build in idea of same direction.

    N — Carefully teach one stroke at a time while children do "sky" writing.

12. Emphasize *observing likeness and differences between similar letters*. Give detailed instruction for forming letters which are commonly reversed.

MIRROR WRITING

1. Material to be copied should be hung at eye level in front of the desk.

2. Have the student begin each line at the extreme left side of the paper beyond the margin, deliberately allowing no space in which to write backward.

3. Have the student start writing at the far left edge of the chalkboard.

4. Mark left-right edges of the paper with a design or color; e.g., green is for left (go); red is for right (stop).

GRASP OF PENCIL

Too tight

1. Have the student hold a ball of paper in the hand while writing.

2. Place the pencil through the holes of a practice golf ball and have the student hold the ball while writing.

Too near the point

1. Wind a rubber band around the pencil and have the student hold the pencil just above the rubber band.

2. Use a commercially available pencil gripper.

NOTE: When a student's ability to see well appears to contribute to handwriting difficulties, discuss the case with the principal and an immediate referral should be made to the Division of Vision Programs. The Vision Programs staff will evaluate the student and provide materials and support, as needed.

ILLUSTRATIVE PROGRAMS FOR MIDDLE AND JUNIOR HIGH SCHOOL STUDENTS

At the "Tune-up Center" of one county middle school, students needing handwriting help were identified by each of the six academic teams. Each team sent twelve students for one period a day for ten days. Students were excused from this period each day, although one team elected to send its students during English period only.

The first day, the class discussed the importance of handwriting to first impressions by the reader. The students became aware that rightly or wrongly they are judged by their handwriting. A handwriting sample was copied and used as a baseline for evaluation and individual needs analysis. The elements of legibility constituted the basis of the diagnosis from which individual programs were designed.

After the first day, the participation was voluntary, and students were excused for tests given in other subjects. The rate of attendance was high.

Each forty-five minute period began with students' tracing and copying the uppercase and lowercase cursive alphabet once, with attention being paid to correct posture, paper placement, and pencil grip. From these and other handwriting samples, students began to identify and self-correct their handwriting illegibilities. The period ended with the copying of a paragraph or a piece of relevant work of the students' choosing.

At the end of the ten days, the original handwriting sample was recopied and evaluated by comparison with the first, to measure progress. The handwriting skills and legibility of all students in the program improved.

In another attempt to remediate handwriting difficulties a county junior high school held a before-school program. Students volunteered to participate in the class, which took place during a period used for remediation and enrichment activities.

Personnel from the central office conducted the class and trained parent volunteers to carry out the techniques.

Approximately 25 students volunteered to participate in this program.

INTEGRATION OF HANDWRITING WITH OTHER SUBJECTS

Every student has something to say! What higher motivation could there be for learning and using legible handwriting?

Handwriting instruction should always be associated with communication, and students should be given opportunities to develop handwriting skills through a variety of learning activities within many subject areas. Combining handwriting instruction with spelling, reading, creative writing, mathematics, social studies, and science programs challenges students' interest while helping them learn to write with proficiency.

After the initial mastery of letter and numeral formations, activities which motivate the primary student to produce legible, attractive written work include:

- writing one's own name
- writing names of family members, friends, pets
- writing labels and captions for pictures, cartoons, drawings, photographs
- writing names of days of week and months
- writing rhyming words, synonyms, antonyms
- writing sentences and questions
- making a weekly/monthly weather calendar
- writing journals

Vocabulary development, language usage, capitalization, punctuation, and spelling can be reinforced while handwriting skills are being developed.

To focus on the use of handwriting as a tool of communication, activities can be used in classroom and/or school learning centers. Topics from all subject areas — English language arts, science, social studies, art, mathematics, music, physical education — can be highlighted. Activities such as the following may be used:

- Copy a schedule of events.
- Complete a sample membership and/or sample order form. (Copies of forms should be available.)
- Label a map.
- Write a sample check. (Blank checks should be available.)
- Write lists such as camping needs, classroom jobs, or picnic menu.
- Make a sign to advertise a product. (Examples: Sport Equipment Exchange, Pet Give Away, or Outgrown Equipment Sale)

Other areas of written work that have been edited and proofread (reports, summaries, original stories, etc.) should be copied in the students' best handwriting.

SUGGESTED ACTIVITIES FOR HANDWRITING CENTERS

Handwriting practice should never be a boring or laborious task to students or teachers. Handwriting instruction, integrated with functional and creative activities, captures students' interest and makes learning and teaching meaningful. Classroom and/or school handwriting centers are limitless in scope and variety when the focus is on proficiency in handwriting as a *communications* tools.

- Paint large letters or words on paper for students to trace with forefinger or to walk the outline.
- Fill dishpan, deep tray, or cat litter pan with sand. Sprinkle water on sand. Students write letters or words in the wet sand with forefinger or a pencil.
- Paint letters on fine sandpaper or textured materials (brocade, cork, felt, leather, rubber, terry cloth). Students trace the letter with forefinger, then write the letter on paper.
- Cut out oaktag letters or words. On reverse side of the oaktag, prick holes with a hat pin following the formation of the letters or words. Students trace the letters or words with forefinger, then write them.

- Have students write letters or words with forefinger in finger paint on finger painting paper.
- Have students use a paint brush dipped in water to write letters or words on chalkboard.
- Write letters or words on acetate or clear plastic sheet with permanent ink. Students trace letters or words, using grease pencil or washable marking pen. Students copy letters or words at the bottom or on the back of the sheet.
- Use ribbon, yarn, or pipe cleaners to form letters. Students trace the letter with forefinger, then write the letter on paper.
- Use newspaper classified ad columns or financial columns, turned horizontally for handwriting practice. (This is good for students learning formation of cursive letters as well as for students needing practice for legible manuscript handwriting.)
- Cover several desk tops with clear contact. The students use grease pencils, crayons, or washable marking pens for handwriting practice.
- Paint letters with white glue or nail polish on oaktag cards. Sprinkle sand, glitter, sawdust, or salt on the wet letters. Students trace the letters with forefinger, then write the letter using a pencil or pen.
- Place 5 centimeters (2 inches) of masking tape at the top of a writing space. Write letters on the tape. Students use this reference when writing. (Commercially-made manuscript/cursive alphabet tape rolls can be purchased from Macmillan Arts & Crafts, Inc.)

- Write a riddle on chart paper. Cover the answer with a flap. Have students copy the riddle, write the answer, and illustrate it.

- Have students listen to a recording of a folk tale or other narrative. Write a sentence(s) and illustrate. Combine the stories into a class book.

- Cut construction paper and writing paper into various shapes. Have students write words or stories to accompany the shapes. Booklets may be clipped to a line for display.

- Have students complete envelopes for "mailing" to peers, older students, or the teacher for evaluation. This activity can also be used to provide practice in proofreading, as shown below in the sample names and addresses which utilize all the letters of the alphabet.

rev t k brokenburg	mrs neala x fairfaix
25 superland highway	1012 gumstown parkway
dunlap iowa 50601	waterfield ohio 45101
miss zilia v yancey	mr ulysss j quick
r f d 2	3249 aquatic lane
evansjac georgia	crazen alaska 99615

- Have students experiment with different kinds of lettering for projects such as writing name plates, title pages, covers, labels, signs, posters, slogans, mottos, quotations, or tags.

- Display samples and pictures of various styles of handwriting:

Arabic	Hebrew
Calligraphic	Illuminated Manuscript
Chinese	Old English
Eighteenth Century	Roman
Gothic	Roman Numerals
Greek	Arabic Numerals

- Display samples of various writing instruments:
  - chalk, crayons, marking pens, pencils, and brushes of varying thickness
  - pen holders and different sizes of pen points
  - engraver, quill pen
  - magic slate and stylus

Encourage students to use this handwriting center for projects to create different styles of writing to communicate a message.

- Have students practice using chalk on a chalkboard or horizontal surface. Writing on a vertical chalkboard is markedly different from sitting at a desk and writing on a horizontal surface. A chalkboard surface can be simulated by covering a table or desk top with chalkboard finish paint.* After the paint dries, the area could be divided into 5-centimeter (2-inch) spaces using a permanent marking pen. Students can practice legible letter formation by writing words and sentences on the table or desk top. After evaluation, the writing on the table or desk top can be removed with a chalkboard eraser or a wet sponge. This painted surface will withstand repeated washings.

  By using a horizontal chalkboard for practice, students will be employing many of the same techniques they use when writing on paper with pencil or pen. This handwriting center could be utilized by the individual student, by peer tutors, or older student/volunteer assistants with direction and supervision from the teacher, just as supervision is necessary when students use the vertical chalkboard.

*Chalkboard finish paint can be purchased at hardware stores.

GUIDELINES FOR PARENTS/GUARDIANS

Teachers can capitalize on parental interest and expertise by suggesting family activities. The emphasis at home should be on informality, avoiding rigid expectations and long repetitive periods of handwriting. As students see other family members using handwriting functionally and creatively, they will appreciate further the need for legible and meaningful written communication.

Teachers might provide parents/guardians with the model MCPS alphabet in this handbook and directions for holding the writing instrument. The school should encourage handwriting practice in meaningful home situations, such as:

- recording phone messages
- making chalk- or corkboard notes
- composing grocery and other shopping lists
- making signs and labels
- writing thank you notes, invitations, and letters
- keeping diaries and journals

Families of children in the early stages of handwriting development can encourage the following activities to reinforce small muscle development and eye-hand coordination:

- throwing and catching balls (large, then small)
- tracing shapes
- working jigsaw puzzles
- pouring water and sand into containers, beginning with large-mouthed jars and moving to small-mouthed bottles
- drawing and coloring designs
- tracing dot-to-dot sequences
- building with blocks or connecting wooden shapes
- picking up small objects
- forming shapes with clay, pipe cleaners, or salt dough*

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*Dough It Yourself Handbook
P. O. Box 9140
Kankakee, Illinois 60901

Families of students in later stages of handwriting development can encourage the following activities at home that will help to improve and reinforce handwriting skills:

- copying spelling words from a model
- arranging and labeling photographs in albums
- weaving
- sewing
- knitting
- making models
- playing pick-up sticks
- playing marbles

MCPS APPROVED HANDWRITING PROGRAMS FOR K-8

The following programs are approved for used in the Montgomery County Public Schools. Supplementary materials can be found in publishers' catalogs. One program is listed at the end of this section for students with special needs.

MCCORMICK-MATHERS PUBLISHING CO.

I Learn to Write, 1973. K-8. These softbound books with colored illustrations "develop written communication skills in an easy-to-read format."

NOBLE AND NOBLE PUBLISHERS, INC.

Better Handwriting for You, 1971. 1-8. These softbound books include transition from manuscript to cursive writing in the second or third grade. Both consumable and nonconsumable books are available.

SCOTT, FORESMAN AND COMPANY.

Writing Our Language, 1976. 1-8. Revised edition. This series, emphasizing legibility, provides practical applications of handwriting.

ZANER-BLOSER.

Creative Growth Through Handwriting, 1979. K-8. This series presents handwriting instruction through a multi-sensory approach, with the goal of effective and original communication. Supportive materials are provided free in the Teacher Guide Pak of each Teacher's Edition.

Expressional Growth Through Handwriting, 1973. K-8. This handwriting program incorporates principles of visualization, verbalization, kinesthetic reinforcement, and emotional involvement.

A Program Approved for Students with Special Needs

SCOTT, FORESMAN AND COMPANY.

D'Nealian Handwriting, 1978. 1-8. This method of teaching handwriting simplifies the transition from manuscript to cursive handwriting as the letter forms remain the same. It allows flexibility for individual differences.

MCPS PAPER, PENCIL, AND PEN SIZES FOR HANDWRITING INSTRUCTION

Warehouse Catalog Item#	Article
	Beginning Manuscript and Manuscript Writing
08-31-059	8½″ x 14″ unruled newsprint paper
08-31-086	8½″ x 14″ newsprint paper, ruled 1½″ long way with ¾″ faint line
08-31-210	12″ x 18″ picture story paper, ruled 1″ long way with ½″ faint line
08-31-083	8½″ x 14″ newsprint paper, ruled 1″ long way with ½″ faint line
08-31-080	8½″ x 14″ white paper, rule 1″ long way with ½″ faint line
08-31-398	Beginners' pencil, large lead
08-31-101	Second grade pencil, large lead
	Beginning Cursive Writing
08-31-077	8½″ x 14″ white paper, ruled ¾″ long way with ⅜″ faint line
08-31-071	8½″ x 11″ newsprint paper, ruled ½″ long way with ¼″ faint line
	This paper is used for *transition* to upper grade paper.
07-21-629	Pencil, #2 black
	Cursive Writing
08-31-062	8½″ x 11″ newsprint paper, ruled ⅜″ short way
08-31-068	8½″ x 11″ white paper, ruled ⅜″ short way
07-21-629	Pencil, #2 black
07-21-600	Ball point pen, black ink
07-21-596	Ball point pen, blue ink

SUPPORTING MATERIALS FOR HANDWRITING INSTRUCTION

In addition to teacher-made centers and activities, there are numerous commercial materials available from approved publishers, some of which are quite inexpenssive. Among such materials are:

see-through overlays for manuscript, cursive, and transition letter formation

alphabet models for desk or wall

plastic-laminated trace-over cards

pens, pencil grips, and writing frames for students with special needs

tactile cards

handwriting center activities posters

evaluation scales

handwriting certificates for different grade levels

Below are listed some commercial resources and models for handwriting activities which can be constructed, duplicated, or made into transparencies.

The Aristeia Organization
The Left-Hand People
9 Rice's Lane
Westport, Connecticut 06880

Lefty Survival Manual, a 24-page book/catalog of information on coping with lefty problems and products for left-handed people. $1.25

Developmental Learning Materials
7440 Natchez Avenue
Niles, Illinois 60648
Phone (312) 647-7800

A wide variety of relatively inexpensive materials to support the classroom handwriting program

Educational Service, Inc.
P. O. Box 219
Stevensville, Michigan 49127

Scribe. Copyright 1976. $5.25 Author, William Hendricks. A *Spice* series publication. Suggested activities for teachers to motivate the teaching of handwriting, regardless of the handwriting program used. Grades K-8.

Hoyle Products, Inc.
302 Orange Grove
Fillmore, California 93015

On request, Hoyle Products will furnish classroom teachers two (2) pen/pencil grips and a primary pencil along with literature and a list of school supply dealers from whom grips can be purchased.

"Morton's Dough-It-Yourself Handbook Rises Again"
P. O. Box 9140
Kankakee, Illinois 60901

Salt sculpture ideas for shaping letters and words

Zaner-Bloser
612 North Park Street
Columbus, Ohio 44215

Chalkboard Techniques and Activities for Teaching Writing. 96 pages. $4.30. A Zaner-Bloser handbook of activities for teaching handwriting by using the chalkboard. All grade levels. Manuscript and cursive forms.

"Solving Handwriting Needs"
Author, F. N. Freeman

This pamphlet discusses handwriting problems and presents methods and materials for correcting them.

BEGINNING MANUSCRIPT ALPHABET*

Lower Case Letters

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

BEGINNING MANUSCRIPT ALPHABET*

Capital Letters

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

MANUSCRIPT ALPHABET*

Lower Case and Capital Letters

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

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UPPER PRIMARY MANUSCRIPT ALPHABET*

Lower Case and Capital Letters

a b c d e f g h i

j k l m n o p q r

s t u v w x y z

A B C D E F G H I

J K L M N O P Q R

S T U V W X Y Z

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

BEGINNING CURSIVE ALPHABET*

Lower Case and Capital Letters

*Used with permission
ZANER-BLOSER, Columbus, Ohio
Copyright 1975, 1979

TRANSITION CURSIVE ALPHABET*

Lower Case and Capital Letters

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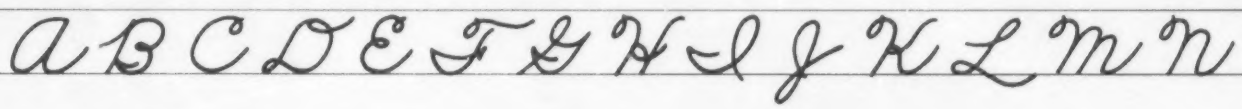
UPPER GRADE MANUSCRIPT and CURSIVE ALPHABETS*

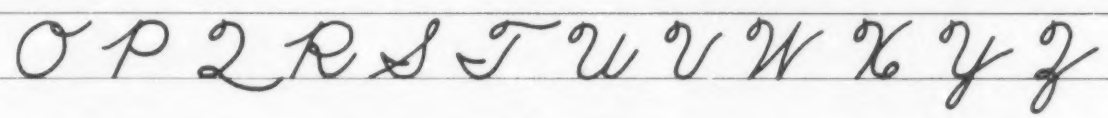
Capital and Lower Case Letters

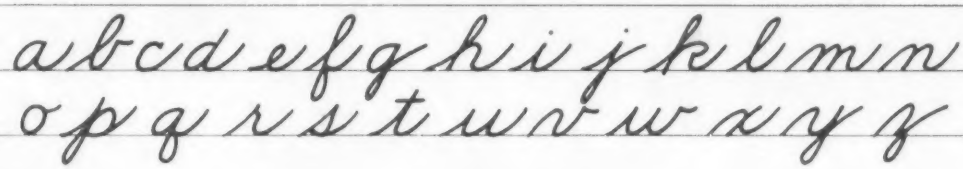
A B C D E F G H I J K L M N

O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n
o p q r s t u v w x y z







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ZANER-BLOSER, Columbus, Ohio
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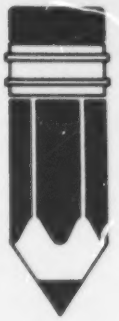
Beginning Writer's Award



This award for beginning manuscript writing is presented to

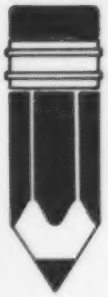
for neatness and for writing basic strokes, circles, and slant lines correctly.

Manuscript Award

This award is presented to

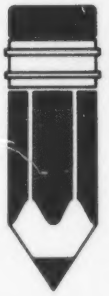
for neatness in writing manuscript numerals and letters in both upper and lower case.

Cursive Handwriting Award



This award is presented to

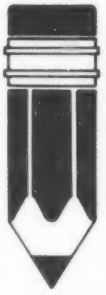
for neatness in writing
cursive numerals and letters in
both upper and lower case.



Distinguished Cursive Certificate

This certificate is awarded to

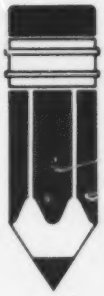
for neatness in writing cursive
numerals and letters with
reasonable speed in all
varieties of written work.



Distinguished Handwriting Certificate

This certificate is awarded to

for continuing progress in writing
both manuscript and cursive
numerals and letters with
reasonable speed in all
varieties of written work.



GLOSSARY

Alignment — the placement of letters in their correct position on the baseline

Baseline — the line on which letters rest

Cursive writing — writing formed by joining the letters of a word in a continuous, flowing motion

Headline — the uppermost line in writing

Legibility — the elements in handwriting necessary for the ease of reading: letter form, size and proportion, alignment, slant, spacing, line quality

Letter form — the formation of letters that is widely accepted

Line quality — writing that is not too light, too dark, nor uneven in color

Lowercase letters — the 26 letters of the alphabet that are not capitals

Manuscript writing — writing formed by separate strokes to make individual letters

Midline — the middle line between the headline and the baseline, whether real or imaginary

Mirror writing — writing in which the letter formation is reversed and the writing direction is from right to left

Proficiency — the highest quality of legibility with appropriate speed

Retrace — Repeat a stroke on the same line as in "B" or "P."

Semi-tall letters — letters which start midway between the headline and the midline to the baseline

Size and proportion — appropriate use of space

Slant — the tilt of letter forms: vertical downstrokes in manuscript writing, parallel downstrokes in cursive writing

Spacing — appropriate distance between letters, words, sentences, and lines of writing

Speed — the rate at which one writes

Transition — the change from manuscript writing to cursive writing

Uppercase letters — the 26 letters of the alphabet that are capitals

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Research indicates that it is essential to teach spelling in conjunction with functional writing. Although considerable research has been directed toward identifying factors affecting legibility of handwriting, researchers have failed to find agreement on such factors. The paper includes bibliographies of references on spelling and handwriting.

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Anderson, Dan W. *Teaching Handwriting*. Washington, D.C.: National Education Association, Association of Classroom Teachers, 1968.

This pamphlet belongs to the "What Research Says to the Teacher" Series. Each pamphlet in the series is designed to serve two functions: 1. to suggest principles and practical procedures that may be applied directly by the classroom teacher, and 2. to provide a springboard for further study and use of research findings. To help teachers further explore research findings, selected references are listed at the end of this booklet.

Arena, John I. (ed.). *Building Spelling Skills in Dyslexic Children*. San Rafael, CA: Academic Therapy Publications, 1970.

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2. Instructional techniques most conducive to children's learning and perceptual-motor development, and correlates of skill development in handwriting

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Jarman, Christopher. "A Helping Hand for Slow Learners." *Special Education: Forward Trends.* Volume 4, Number 4. December 1977, pp. 11-13.

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4. slant
5. quality of line

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Rives, Florence, and others. "Creative Classroom." *Teacher.* Volume 95, Number 4. December 1977, pp. 75-82.

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